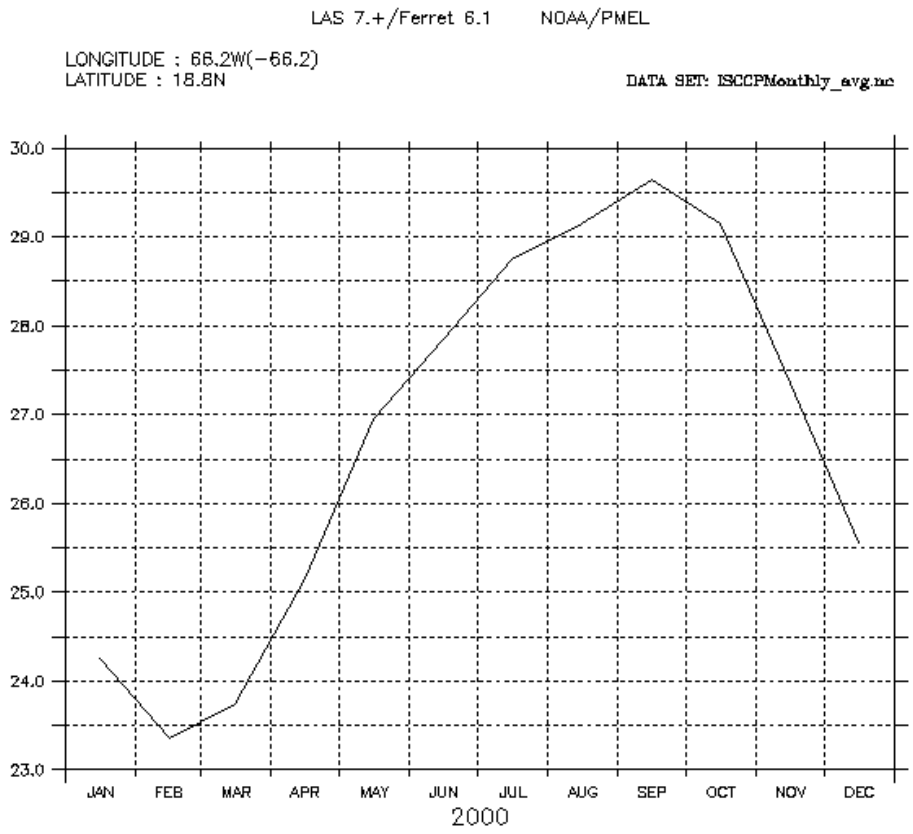
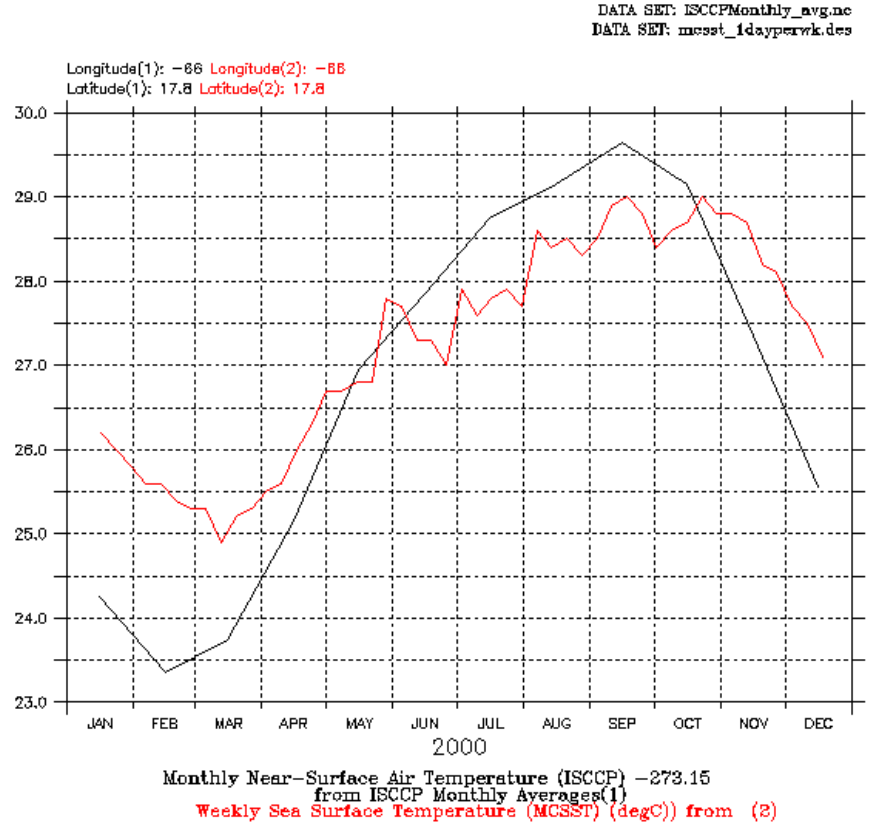
Lesson 21: Surface Air Temperature Trends of the Caribbean





Questions:

1. Track the changes of the near-surface air temperature over time. What happens to the near surface air temperature as you go from August to November?

According to the graph above, the near-surface air temperature peaks at a maximum in September and then begins to decrease.

2. Find the minimum and maximum temperature for the year. What is the temperature range for your location?

The minimum is roughly 23.4 and the maximum is 29.6, which means the temperature range is about 6.2 degrees Celsius. Students can identify these values using the graph, picking the highest and lowest points on the graph and subtracting them to solve for the temperature range.

3. Describe the relationship between the temperature change and the change in season.

The temperatures are generally colder in the winter months and warmer in the summer months, however there is significant temperature changes in between (Fall and Spring).

4. Do the results support your prediction about seasonal patterns at this location in the Caribbean Sea? Explain to your group or class, using examples from the plots.

5. From analyzing the plot from Part II, describe the trends in the near-surface air and sea surface temperatures. Describe the relationship between these two variables.

Both variables increase over the summer months, reaching their peak in September. However, near-surface air temperature has a smaller temperature range, decreasing and increasing at a slower rate than the sea surface temperature. The near-surface air temperature also has much more fluctuation between individual months than that of the sea surface temperature.